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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kuen-Dong Ha

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03/12/2003

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EXAMINER

HARPER, HOLLY R

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/835,592

Applicant(s)

HA ET AL.

Examiner

Holly R. Harper

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Examiner's Note:

- On page 5, Line 21 of the Specification, reference number "612" should be "162."
- On page 6, Line 12 of the Specification, reference number "62" should be "162."

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4, 5, 10-12, 15-17, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Gorog et al. (USPN 6,300,712) hereinafter "Gorog".

Regarding claim 1, the Gorog reference discloses an assembly for supporting a mask frame to a stud of a panel in a cathode ray tube (Figure 2). The mask frame has a rectangular rim in parallel with the tube axis and a flange vertically extending from a rear end of the rectangular rim. The shadow mask has a skirt fixed on an inside surface of a front end of the rectangular rim (Figure 1). The shadow mask has a first plane perpendicular to the tube axis and passing a central surface of the shadow mask. The Gorog reference also discloses a bracket with a suspending arm joined by a connecting arm to a fixing arm (Figure 5). The suspending arm and fixing arm are spaced apart from each other and in parallel with the tube axis. The suspending arm has a hole coupled to the stud. The fixing arm is fixed on an outside surface of the rectangular rim of the mask

frame. The connecting arm has a second plane substantially parallel to the first plane of the shadow mask and spaced apart from the first plane by a first distance. The first distance is greater than a second distance between the first plane and a third plane passing a center line of the stud (Figure 5).

Regarding claim 2, the Gorog reference discloses that the connecting arm is perpendicular to both the fixing arm and the suspending arm (Figure 5).

Regarding claim 4, the recitation "characteristic for absorbing vibration transmitted from both said mask frame and said panel and offsetting the vibration" has not been given patentable weight because is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Regarding claim 5, the Gorog reference discloses that the suspending arm, connecting arm, and fixing arm are made in a single body and a flat plate (Figure 5).

Regarding claim 10, the Gorog reference discloses that the skirt of the shadow mask is closer to the third plane of the stud than the second plane of the connecting arm (Figure 5).

Regarding claim 11, the Gorog reference discloses an assembly for supporting a mask frame to a stud of a panel in a cathode ray tube (Figure 2). The mask frame has a rectangular rim in parallel with the tube axis. The shadow mask has a skirt fixed on an inside surface of a front end of the rectangular rim. The shadow mask has a first plane perpendicular to the tube axis and passing a central surface of the shadow mask (Figure 1). The Gorog reference also discloses a bracket with a suspending arm joined by a

connecting arm to a fixing arm and being made in a single body. The suspending arm and fixing arm are flat plates and parallel to each other. The suspending arm has a hole coupled to the stud. The fixing arm is fixed on an outside surface of the rectangular rim of the mask frame. The connecting arm has a second plane substantially parallel to the first plane of the shadow mask and spaced apart from the first plane by a first distance. The first distance is greater than a second distance between the first plane and a third plane passing a center line of the stud (Figure 5).

Regarding claim 12, the Gorog reference discloses that the suspending arm and fixing arm are parallel to the tube axis and perpendicular to the connecting arm (Figure 5).

Regarding claim 15, the recitation “characteristic for absorbing vibration transmitted from both said mask frame and said panel and offsetting the vibration” has not been given patentable weight because is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Regarding claim 16, the Gorog reference discloses that the connecting arm and fixing arm are right angled to each other (Figure 5).

Regarding claim 17, the Gorog reference discloses that the bracket has a bent formed between the connecting arm and any one of the suspending arm and fixing portion (Figure 5).

Regarding claim 20, the Gorog reference discloses a bracket having an opening formed between the free ends of the suspending arm and fixing arm and the opening

opposite to the connecting arm. The Gorog reference also discloses a stud disposed between the opening and the connecting arm (Figure 5).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 6-9, 13, 14, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorog et al. (USPN 6,300,712) hereinafter "Gorog".

Regarding claims 3 and 18, the Gorog reference discloses the claimed invention except for the limitation of a connecting arm having a length of 5-40 mm. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Thus, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have a connecting arm with a length of 5-40 mm, since discovering an optimum value of a result variable is considered within the skills of the art.

Regarding claims 7 and 19, the Gorog reference discloses the claimed invention except for the limitation of the fixing arm and suspending arm being spaced apart by a length of 5-40 mm. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Thus, it would have been obvious to one of ordinary skills in the art at the time the invention was made to space the fixing arm and suspending arm 5-40 mm apart, since discovering an optimum value of a result variable is considered within the skills of the art.

Regarding claims 6, 8, 13, and 14, the Gorog reference discloses the claimed invention except for the limitation of the connecting arm being wave shaped, round, and U shaped. It has been held that a change in size is generally recognized as being within the level of ordinary skill in the art. It would have been obvious to one having ordinary skill in the art to alter the shape of the connecting arm to wave shaped, round, and U shaped, since such a modification would have involve a mere change in the shape of a component.

Regarding claim 9, the Gorog reference discloses the claimed invention except for the limitation that the flange of the mask frame is placed on the second plane of the connecting arm. However it is noted that the placement of the flange of the mask frame on the connecting arm is not shown to solve any problems or yield any unexpected results that are not within the scope of Gorog's mask frame assembly. Accordingly, the placement of the flange of the mask frame on the connecting arm is considered to be an obvious matter of design choice.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akoh et al. (USPN 6,437,495) has a bracket that is U-shaped. Ichigaya et al. (USPN 4,798,992) has several variations on bracket shape.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Harper whose telephone number is (703) 305-7908. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Holly Harper
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